



**Testimony of Doris W. Koo
President and Chief Executive Officer
Enterprise Community Partners
For the Committee on Financial Services
United States House of Representatives**

**"H.R. 6078: the Green Resources for Energy Efficient Neighborhoods Act of 2008"
June 11, 2008**

Introduction

Chairman Frank, Ranking Member Bachus and members of the Committee, thank you for this opportunity to testify on the "GREEN Act." I am Doris Koo, president and chief executive officer of Enterprise Community Partners (Enterprise).

Enterprise is a national nonprofit organization whose mission is to see that all low-income people in the United States have the opportunity for fit and affordable housing and to move up and out of poverty into the mainstream of American life. Enterprise provides financing and expertise to community-based organizations for affordable housing development and other community revitalization activities throughout the U.S. Enterprise has invested more than \$9 billion to create more than 240,000 affordable homes and strengthen hundreds of communities across the country. Enterprise also works closely on a bipartisan basis with policymakers at all levels of government to develop solutions to low-income community needs.

Enterprise commends the Committee for convening this hearing. The timing could not be better, as comprehensive climate change policies have recently been introduced in the House and debated in the Senate, gasoline prices are \$4 per gallon in communities around the country and the *interconnected* housing, environmental and transportation challenges facing low-income people and communities are more severe than ever.

The principles and practices of "green" development offer proven, cost effective ways to address current and longstanding housing challenges, rising energy and transportation costs and the effects of global warming, while creating jobs at potentially huge scale. "Greening" affordable housing – making it more energy efficient, healthier and more environmentally responsible – is also a tangible way to ensure that the enormous promise of the emerging green economy includes opportunities for everyone in our society. And green development provides a powerful framework for rethinking how we create and sustain communities that are better places for today and for future generations.



Enterprise is working to bring the benefits of sustainable development to low-income people at an unprecedented scale through the Green Communities initiative. Through Green Communities, Enterprise provides funds and expertise to enable developers to build and rehabilitate for-sale houses and rental apartments that are healthier, more energy efficient and better for the environment – without compromising affordability. Enterprise also works with state and local governments and with Congress to develop policies that lead to more environmentally sustainable homes and communities.

Green Communities homes are built according to the Green Communities Criteria, the first national framework for environmentally sustainable affordable homes. The Criteria were developed in collaboration with and endorsed by a number of leading environmental, energy, green building, affordable housing and public health organizations.

To date, Enterprise has invested more than \$570 million to create more than 11,000 green affordable homes in more than 250 developments in 28 states. We have trained 3,000-plus housing professionals and helped more than 20 states and cities implement greener housing policies. We share that initial progress because it is Enterprise's practice to advocate for public policies based on real experience on the ground. Our comments are based not on theory or ideology, but practical experience in housing development and a growing body of research.

Enterprise's vision through Green Communities is for all affordable housing in the United States to be environmentally sustainable. Based on our experience and remarkable momentum across the country, we believe that goal is achievable in the near term. Grassroots housing organizations, in partnership with financial institutions, foundations, mayors and governors, are showing it is possible. Federal leadership can take this progress to scale. It is time for a national commitment to make green and affordable one and the same.

The GREEN Act represents a major step towards that goal. We commend Representative Perlmutter for his vision and leadership in introducing the bill. The GREEN Act is a sweeping proposal with many provisions that would have substantial positive impacts in the housing market, especially the affordable housing sector. Overall, Enterprise enthusiastically supports the bill. We believe it would be an even stronger proposal with some modifications, which we reference in the balance of our testimony.

In the letter inviting Enterprise to testify, the Committee asked us to discuss several issues in a number of questions. The central issues at the heart of the Committee's questions are:

- The impacts of establishing minimum standards for energy efficiency in housing, including energy savings, carbon emission reductions and job creation, as under the GREEN Act
- The practicality of implementing such standards, as under the GREEN Act
- The importance of additional resources, such as block grant funds, and policies to encourage financial institutions to provide capital for green housing, such as energy-efficient mortgages and revisions to the Community Reinvestment Act, as under the GREEN Act



The Case for a National Commitment to Green Affordable Homes

Before addressing these issues, we believe it is important to establish context for our responses, specifically to frame the reasons why greening affordable housing should be a national priority. What follows is a summary of a new Enterprise publication entitled *Bringing Home the Benefits of Energy Efficiency to Low-Income Households*, which we have included with our testimony. The publication makes a comprehensive case for a national commitment to green affordable homes and lays out a 10-point policy platform for federal leadership.

There are roughly 25 million households with annual incomes of \$25,000 or less in the country.ⁱ This income level is generally in line with the federal housing policy definition of “very low-income.” It is approximately equivalent to 50 percent of the national median income and 150 percent of the federal poverty level for a family of three. Roughly two-thirds of these households are renters and one-third are homeowners. For these families and individuals, and many more with higher incomes, the daily realities of housing challenges, rising energy and transportation costs and the impacts of climate change are interconnected.

Very low-income people are much more likely to live in less efficient buildings, which exacerbates the affordability problems millions face. Very low-income owners may only be able to afford homes that need energy upgrades to begin with and may have less income with which to make energy improvements. The Harvard University Joint Center for Housing Studies has reported:

While low-income households will, out of necessity, replace furnaces or appliances that break, they will not usually install insulation or other more costly measures because they lack the money to do so. Instead, they often take simpler and less effective steps such as putting plastic on windows in the winter and using towels to stop drafts from doors and windows.ⁱⁱ

Low-income renters typically can afford only modest monthly payments, which constrains the ability of building owners to make building improvements. And more than half of low-cost, privately owned rental stock was built at least 30 years ago. According to Harvard University’s Joint Center for Housing Studies, “much of [the inventory] is owned by individuals without the skill and resources to manage the properties profitably. And when their rental units cannot generate enough revenue to cover basic operating costs, these owners have little choice but to cut back on maintenance and repairs.”ⁱⁱⁱ

Meanwhile, home energy costs have increased much faster than incomes for very low-income households in recent years, rising 33 percent since 1998. Families eligible for federal home energy assistance spend one-fifth of their income on home energy bills – six times more than the level other income groups spend.^{iv}



Not surprisingly, high utility bills force many very-low income households to make desperate tradeoffs between heat or electricity and other basic necessities. A survey of households that received federal home energy assistance during a five-year period found that 47 percent went without medical care, 25 percent failed to fully pay their rent or mortgage and 20 percent went without food for at least one day as a result of home energy costs.^v

In addition, low-income and minority communities are more likely to live in worse environmental conditions and experience greater rates of disease, limited access to health care and other health disparities. Studies have shown that negative aspects of the built environment tend to magnify these disparities.^{vi} Housing conditions in particular are important factors influencing health. Specific housing hazards include exposure to allergens that may cause or worsen asthma, lead-based paint hazards, mold and excess moisture and indoor air quality.

A study by the National Housing Conference Center for Housing Policy found that transportation costs are also rising, especially for very low-income families. NHC also found that families earning \$20,000 to \$50,000 spend nearly half their incomes on housing and transportation costs combined. Again, families face brutal tradeoffs. According to the report:

“Drive ‘til you qualify” is an option used by many Working Families seeking affordable housing by moving to far-flung suburbs. Others, by necessity, live in inner city or inner-suburban locations where affordable housing is located, but access to suburban jobs is limited. But for many Working Families their effort to save on housing expenses leads to higher transportation costs—and an even larger portion of their budget consumed by both items.^{vii}

Climate change also imposes direct daily burdens for low-income people and minority communities. A report from the Congressional Black Caucus Foundation found that African-Americans are “disproportionately burdened by the health effects of climate change,” including increased deaths from heat waves and extreme weather, as well as air pollution and the spread of infectious diseases. African-Americans will also bear the brunt of unemployment and economic hardship exacerbated by climate change, according to the report, even though they emit 20 percent less carbon dioxide than whites. The report concluded: “Stark disparities exist in the United States between those who benefit from the causes of climate change and those who bear the costs of climate change.”^{viii}

Yet proposed approaches to tackle climate change by capping carbon emissions would have deleterious effects on low-income people. The Congressional Budget Office (CBO) has determined that:

Regardless how the [carbon emissions] allowances were distributed, most of the cost of meeting a cap on CO₂ emissions would be borne by consumers, who would face persistently higher costs for products such as electricity and gasoline. Those price increases would be regressive in that poorer households would bear a larger burden relative to their income than wealthier households would.^{ix}



CBO noted that climate change policies that had only the “modest” effect of reducing emissions by 15 percent would impose an estimated \$750-\$950 a year in added costs, on average, on families in the bottom 20 percent of the income spectrum, those with average incomes of approximately \$13,000.^x By far the highest share of these higher costs – 45 percent – would come from more expensive home energy, according to the Center on Budget and Policy Priorities.^{xi}

In summary, housing, environmental and transportation challenges are inextricably linked and mutually reinforcing for millions of very low-income households. We can make progress on all these issues simultaneously and lock in long-term benefits by making an investment in greening affordable homes. But we need to think and act with more imagination and boldness than we have before. There is no more time for small-scale solutions and incremental progress.

Chairman Frank, Representative Waters and other members of this Committee have shown leadership already, developing the “HOPE VI Improvement and Reauthorization Act of 2007” (H.R. 3524), which would provide \$800 million annually for the green revitalization of distressed public housing communities. The bill passed the House with bipartisan support.^{xii} The GREEN Act is an opportunity to continue this progress.

Impacts of Establishing Minimum Standards for Energy Efficiency in Affordable Housing

The GREEN Act ostensibly would establish minimum standards for energy efficiency in new and existing housing supported by federal housing programs (Section 2). For new construction, the reference point apparently would include either the most current version of the American Society of Heating, Refrigerating and Air Conditioning Engineers Standard, the International Energy Conservation Code or another benchmark approved by the Secretary of Housing and Urban Development (HUD). For rehabilitation of existing properties, the reference point apparently would include either a reduction of energy use by 30 percent compared to the level before rehabilitation or another benchmark determined by the Secretary.

The bill also apparently would encourage new and rehabilitated development to meet more comprehensive criteria for better building and environmental performance that include improved indoor air quality, reduced water use, lower environmental impact on the surrounding site, greater density and access to transit. The bill would provide “additional credit for further compliance” with the new requirements for developments that incorporated comprehensive criteria reflected in leading green development programs, as well as other frameworks the Secretary of HUD could identify.

It's Time to Raise the Bar on Performance in Affordable Housing

Enterprise strongly supports raising the bar on environmental performance in affordable housing. Experience and a growing body of evidence show that higher thresholds appropriately implemented can directly lead to significant environmental, economic and health benefits without imposing infeasible higher costs.



Congress should proceed carefully in establishing benchmarks that define green building requirements. This is not about advocating for one green building program over another. In fact, there are several proven programs in the marketplace, including the Green Communities Criteria, that can provide the basis for Congress to set policy. Congress and HUD have ample authority and ability to establish benchmarks based on existing programs that do not run afoul of laws or regulations in other areas. Whether these technical aspects of the GREEN Act must be modified is an issue the Committee should explore.

More broadly, Congress clearly can reference in legislation proven green development criteria that measurably improve environmental performance without limiting its flexibility or that of HUD or local communities to revise them over time or adopt more targeted solutions. In fact Congress does not even need to pick and choose among green building programs; it could simply raise the bar by establishing specific, measurable targets for building performance based on widely accepted benchmarks such as Energy Star.

We urge that Congress not allow arguments about green building programs to distract from the task at hand, however, or divert the focus from confronting our major environmental, energy and housing challenges with the boldness and the urgency required. Quite simply, it is time for Congress to stop spending taxpayer funds to support design and development of affordable housing – and other types of buildings – that does not meet more demanding minimum criteria for greater energy efficiency, better indoor air quality and lower carbon emissions that create higher quality homes and communities for our citizens. We can do better, and we must.

This is not to say Congress should apply a sweeping mandate to all affordable housing right away. Stronger criteria for building performance, such as in the GREEN Act, should be phased in and accompanied by resources to enable developments to meet new requirements cost-effectively, as discussed below. Special attention should be paid to the unique issues in existing buildings; the energy efficiency benchmark for rehabilitation under the GREEN Act in particular may not be achievable for all existing properties across the board.

Special attention also must be paid to the needs of smaller developments, communities and housing organizations, such as minority contractors. And additional incentives should be provided to enable developments and sponsors on the leading edge to continue to innovate and achieve deeper environmental benefits for families and communities in their developments.

Green Homes Deliver Multiple Benefits to Low-Income People

The impact of increasing energy efficiency and making other improvements in the performance of affordable housing would have significant health, economic and environmental benefits. Enterprise's experience through the Green Communities program indicates that new and existing properties that achieve 20 percent-30 percent greater energy efficiency generate substantial cost savings from lower energy and water usage – hundreds of dollars per unit on an annual basis in many cases. These savings either accrue directly to low-income residents, or are reinvested back into properties by building owners, or both.



This is consistent with other research on improving energy efficiency in very low-income homes. For example, the Department of Energy reports that Energy Star-qualified single-family homes delivered \$200-\$400 in annual savings compared to conventional homes, with potentially substantial additional savings on maintenance.^{xiii}

For multifamily apartment owners, more energy efficient buildings may generate higher and more stable cash flow from rents. To the extent energy improvements were part of more holistic green building rehabilitations, rental properties may be more durable and higher performing and potentially more valuable assets to own over the long term. Renters themselves stand to benefit, as noted above. A study of the costs and benefits of green very low-income housing by New Ecology and the Tellus Institute concluded: "For residents of affordable housing units, the life-cycle financial outcome [of energy and healthy home upgrades] is almost always positive." In virtually all the cases, energy and water utility costs are lower than their conventional counterparts.^{xiv}

In addition, studies of home weatherization and retrofit programs have catalogued an "array of benefits beyond energy savings," including greater comfort, convenience, health, safety and noise reduction. These "non-energy benefits" have been broadly estimated to be worth 50 percent-300 percent of annual household energy bill savings.^{xv} There is also emerging evidence that green homes are healthier.

While researchers are still determining the most effective specific approaches, according to Rebecca Morley, executive director of the National Center for Healthy Housing:

It is clear that we can expect substantial health gains by building green. Instead of paying for medical care that could have been avoided, occupants in Green Communities will be able to keep more of their income and avoid the suffering and loss associated with poor health.^{xvi}

A promising effort is underway at the High Point Green Communities development in Seattle. Some homes have additional green features to address asthma. Preliminary research results show very positive results:

- The average number of symptom-free days for the homes' asthmatic residents in a given two-week period went from 7.6 days in the residents' old homes to 12.4 days in their new homes.
- In their old homes, 61.8 percent of residents had unplanned urgent clinical visits during the test period; in their new homes, that plummeted to 20.6 percent.
- In the home environment, asthma triggers were also greatly reduced.
- Caretaker quality of life improved.
- Mold was eliminated completely after one year.^{xvii}



Green Affordable Homes Can Help Fight Climate Change and Create Green Jobs

Energy efficiency in very low-income housing at scale also can help fight climate change. Residential units consume 22 percent of the nation's energy and cause 20 percent of our greenhouse gas emissions.^{xviii} The 25 million units that are home to our lowest income citizens are almost one-quarter of all residential units in the country. Most of these units were built before 1980 and many were poorly constructed. Not surprisingly, lower income households use 28 percent more energy per square foot than higher income households, primarily because they live in older, less energy efficient homes, according to the Energy Programs Consortium.^{xix}

While research on the carbon reduction potential from energy efficiency in very low-income homes is limited, it suggests significant impact. One recent analysis suggest that the 34 million households eligible for federal home energy assistance generated 276 million tons of carbon dioxide emissions, 27.5 percent of total emissions from residential units overall.^{xx} Another study found that weatherizing 12,000 homes in Ohio avoided more than 100,000 pounds of sulfur dioxide and 24,000 tons of carbon dioxide, while cutting average utility costs for low-income homeowners by an average of several hundred dollars per year.^{xxi}

In addition, increasing energy efficiency in low-income homes attacks a significant contributor of greenhouse gas emission in the U.S. – residential homes – at the root of the problem: the buildings themselves. And it reduces emissions for the long term. While critically important, other approaches to ensuring equity in climate change policy, such as helping low-income people afford higher energy costs, do not deliver these enduring systemic benefits.

Investment in increasing energy efficiency in very low-income homes would generate significant economic activity in the construction industries and other sectors that have been hard hit by the economic downturn. According to the Center for American Progress, residential construction employment – the component of the construction sector most directly affected by the housing slump – fell nearly 7 percent in 2007, a loss of nearly 200,000 jobs.^{xxii} Smart federal investments can help this critical industry to our economy bounce back more quickly.

Energy efficiency and broader green home rehabilitation and new construction can be an especially promising basis for creating good “green collar” jobs for low-income people. A recent study identified 22 different job sectors of the U.S economy that currently provide workers with green collar jobs, of which 11 were directly (not to say exclusively) related to green home rehabilitation, including several specifically tied to energy efficiency.^{xxiii}

The condition of many homes and apartments where our lowest income citizens live creates opportunities for significant energy savings and other environmental improvements through cost-effective rehabilitation measures. These approaches – insulation, chimney and roof repairs; caulking and sealing; window replacements; installation of energy-efficient equipment; and systems and building testing – offer good paying jobs for which low-income workers could be trained and employed.



Increased investment in green very low-income home rehabilitation could create these jobs at scale. One study of a residential retrofit initiative in Germany showed that 140,000 jobs were saved or created in retrofitting 200,000 homes.^{xxiv} The Department of Energy (DOE) estimates that every \$1 million invested in weatherization programs creates 52 low-income community jobs.^{xxv}

Of course, not all construction jobs on green very low-income developments could fairly be characterized as “green jobs” absent an intentional effort to provide training in the aspects of the work that were more energy efficient and environmentally responsible. Even without such an explicit commitment, green home rehabilitation and construction “does have the potential to create entry level job opportunities for low-income and people of color when cities implement a combination of policies that promote green building, job training and labor standards.”^{xxvi}

Green jobs associated with very low-income housing can be created outside construction as well in the areas of home energy audits, inspections and building performance testing. And as innovation and public policies accelerate market penetration of renewable energy technologies, opportunities should emerge to create more green economy jobs, and deliver the energy and environmental benefits of clean energy, to low-income people through energy efficient home construction and rehabilitation.

Finally, investing in energy efficiency in very low-income housing can spur industry innovation. As Dan Reicher of Google, formerly the federal Acting Assistant Secretary of Energy for Energy Efficiency and Renewable Energy, has noted:

The advanced technologies pioneered in the federal low-income weatherization program could be readily applied to the U.S. housing stock at large with even greater energy savings. One technology developed by the Department of Energy uses a pressurization device and simple infrared sensors to pinpoint leaks down to the size of a nail hole for about \$100 per home. With this information, insulation can be installed in the right places for the least amount of waste.^{xxvii}

The Practicality of Green Affordable Housing

The issue of practicality in green development gets at cost and capacity. Can green affordable developments achieve environmental criteria within their typically limited budgets? Do sponsors have the necessary skills and expertise? Based on Enterprise’s experience, we believe the answer to the first question is “yes” and the answer to the second is, “some, but not all.”

In creating Green Communities, Enterprise sought to show that all affordable housing – new construction and rehabilitations, ownership as well as rental, large urban developments and small rural projects – could be green within the budgets and capacity of the typical affordable housing developer. Enterprise also intended to show that green affordable developments could be created for little if any higher development costs than conventional projects that do not offer the same benefits. And Enterprise endeavored to demonstrate the benefits of green affordable development.



Experience suggests it can be done. The Green Communities portfolio represents virtually every form of housing in every type of climate in every kind of community in the country. New rental construction in the suburbs outside Portland, Ore. Homeless housing on an infill site in downtown San Francisco. Single family homeownership in Blacksburg, Va. Senior living with services in Baltimore. Farmworker homes in rural Ore. Historic preservation outside Chicago. Family housing in Billings, Mont. Adaptive reuse with solar power in central Los Angeles. New subdivision for-sale units in Bonita Springs, Fla. Public housing revitalization in Cleveland. Transit oriented development in Cambridge, Mass.

Enterprise's extensive evaluation efforts are generating data that show that we can create highly sustainable homes for low-income families such as these for only marginally higher development costs – 2 percent-4 percent on average – and that costs can come down with experience. Critically, our evaluation suggests that most of the marginally higher costs are attributable to measures that generate financial savings, such as energy and water efficiency features, or enable developments to properly plan an “integrated design,” which has been shown to lower costs and enhance environmental performance in buildings.

Of course, there are examples of green developments that cost more than conventional developments, just as there are many non-green developments that go over budget. The point is that we can no longer allow the lowest common denominator to constrain federal leadership in the face of the overwhelming body of experience and major mounting challenges.

As noted, a national commitment to bring home the benefits of green development to low-income families would need to be phased in over time. Greening all affordable homes would require long-term commitment for practical as well as budgetary reasons. Conditions vary widely across the affordable inventory. There is a huge need to scale up the delivery system – contractors, energy auditors and local government staff – to implement a major national effort. And investments in green affordable homes must go hand-in-hand with strategies to encourage smarter land use and transportation.

Initial investments should prioritize communities and homes that are most in need – generally older ones built before 1980. Buildings more in need of the most extensive renovation will offer the greatest opportunities for ensuring energy and other environmental benefits. With respect to newer buildings, consideration should be given to targeting resources to methods most likely to achieve the deepest energy benefits, such as insulation, sealing and replacing heating and cooling systems. Although, wherever possible, the most holistic construction and rehabilitation approaches should be implemented even on more moderate scale rehabilitations.



The Need for Additional Resources

The GREEN Act would provide new federal resources for green affordable development primarily through loans (Section 13) and a block grant (Section 15). These funds generally would support hard costs of energy efficiency improvements. The bill also would provide critical resources to build capacity and provide technical assistance to enable developments to achieve green goals cost-effectively. One especially important provision would provide funds to strengthen the capacity of community-based organizations in green development (Section 17).

It is not clear precisely how much direct federal investment the GREEN Act would authorize. To frame for the Committee the potential scope of a national commitment to green affordable housing, Enterprise projects that a federal commitment of \$5 billion a year over 10 years could deliver huge benefits across the board: 25 percent-40 percent energy savings in up to 25 million residential units, up to 50 million tons of carbon dioxide emissions avoided and hundreds of thousands of green jobs created annually when fully implemented.

Such a federal commitment is relatively modest when one considers that the U.S. Department of Housing and Urban Development (HUD) currently pays more than \$4 billion annually in utility bills in often inefficient government-assisted properties that constitute a fraction of the homes and apartments that could benefit. And \$5 billion is a very small share of the projected revenues that would be generated under proposals to curb greenhouse gas emissions under consideration in Congress and supported by the major candidates for president.

Federal funding is a relatively small part of the equation in our vision of the transformation within our grasp in affordable housing. Capital and innovation must come from mainstream financial institutions to make major progress and targeted federal incentives have an important role to play at this formative stage. The GREEN Act recognizes this. The bill would facilitate it by providing Fannie Mae and Freddie Mac extra credit towards their annual affordable housing finance obligations for funding mortgages that incentivize energy efficiency (Section 4) and by enabling banks to receive favorable consideration under their Community Reinvestment Act requirements for loans, investments and services that support green affordable homes for low-income people (Section 20).

Enterprise supports these proposals. Each would stimulate innovation among key actors in the housing finance system. Both would work within the current statutory and regulatory framework for covered institutions. Neither would undermine the core public purposes in the statutes; Fannie Mae and Freddie Mac's core affordable housing goals and banks' obligations to serve low- and moderate-income communities under CRA would remain fundamentally unchanged.



Conclusion

Several factors suggest the time is now to make energy efficiency more mainstream in very low-income housing. Worsening housing, environmental and transportation needs and growing public awareness of climate change is driving energy investment and innovations among a wide range of industries, including housing and construction, of which very low-income housing is an important sub-sector. Green building practices emphasizing energy efficiency are becoming more widespread among very low-income housing providers. State and local policymakers are starting to take serious action on climate and energy issues, opening opportunities to create policies and public-private partnerships.

Now is the time for federal leadership. The federal government has an important role to play in accelerating the transformation of affordable housing and bringing home the benefits of the emerging green economy to low-income families and communities. The GREEN Act would be a groundbreaking step in the right direction. We look forward to working with the Committee to pass this bill this year.

- ⁱ Only about 6 million of these households receive any form of federal housing assistance.
- ⁱⁱ "America's Rental Housing: Homes for a Diverse Nation," Joint Center for Housing Studies of Harvard University (2006).
- ⁱⁱⁱ Ibid.
- ^{iv} "The Increasing Burdens of Energy Costs on Low-Income Consumers," American Gas Association (September 26, 2007).
- ^v "2005 National Energy Assistance Survey," National Energy Assistance Directors' Association (September 2005).
- ^{vi} Ernie Hood, "Dwelling Disparities: How Poor Housing Leads to Poor Health" *Environmental Health Perspectives*, May 2005.
- ^{vii} Barbara J. Lipman, "A Heavy Load: The Combined Housing and Transportation Burdens of Working Families," National Housing Conference Center for Housing Policy (October, 2006).
- ^{viii} "African Americans and Climate Change: An Unequal Burden," Congressional Black Caucus Foundation (July 21, 2004).
- ^{ix} "Trade-Offs in Allocating Allowances for CO2 Emissions," Congressional Budget Office (April 25, 2007).
- ^x Ibid.
- ^{xi} Robert Greenstein, Sharon Parrott and Arloc Sherman, "Designing Climate Change Legislation that Shields Low-Income Households From Increased Poverty and Hardship," Center on Budget and Policy Priorities (November 8, 2007).
- ^{xii} The GREEN Act contains substantially similar provisions specifically related to the green features in HOPE VI developments (Section 17) as H.R. 3524.
- ^{xiii} See www.energystar.gov/index.cfm?c=new_homes.nh_benefits.
- ^{xiv} William Bradshaw et al., "The Costs & Benefits of Green Affordable Housing," New Ecology and the Tellus Institute (2005).
- ^{xv} Jennifer Thorne Amman, "Valuation of Non-Energy Benefits to Determine Cost-Effectiveness of Whole House Retrofits Programs: A Literature Review," American Council for an Energy-Efficient Economy (May 2006).
- ^{xvi} Statement of Rebecca Morley, MSPP, Executive Director, National Center for Healthy Housing Before the Environmental Public Works Committee United States Senate May 15, 2006.
- ^{xvii} T.K. Takaro, MD, MPH, et., al., "Clinical Response in Asthma From Improved Housing Design and Construction," presentation at US Green Building Council's Greenbuild Conference, November 2007.
- ^{xviii} "Income, Energy Efficiency and Emissions: The Critical Relationship," Energy Programs Consortium (February 26, 2008)
- ^{xix} Ibid.
- ^{xx} Ibid
- ^{xxi} "Testimony of Dan W. Reicher, Director, Climate Change and Energy Initiatives, Before the Senate Committee on Finance" Google.org (February 27, 2007).
- ^{xxii} John Podesta, Laura Tyson, Sara Rosen Wartell, "A Practical and Progressive Economic Stimulus and Recovery Plan," Center for American Progress (January 17, 2008).
- ^{xxiii} Raquel Pinderhughes, Ph.D., "Green Collar Jobs: An Analysis of the Capacity of Green Businesses to Provide High Quality Jobs for Men and Women with Barriers to Employment," City of Berkeley Office of Energy and Sustainable Development (2007).
- ^{xxiv} *Green Jobs: Towards Sustainable Work in a Low-Carbon World*, Worldwatch Institute (2008).
- ^{xxv} "Weatherization Assistance Program: Improving the Economies for Low-Income Communities," U.S. Department of Energy (August 2006).
- ^{xxvi} "Community Jobs in the Green Economy," Apollo Alliance and Urban Habitat (2007).
- ^{xxvii} Reicher, Ibid.

